

ABSTRACT

A gait generating system for a mobile robot has n dynamic models and determines a first gait parameter defining a desired gait such that the boundary condition 5 of a gait on a first dynamic model is satisfied. The first gait parameter is corrected step by step by using an m-th dynamic model (m : integer satisfying $2 \leq m \leq n$), which is each dynamic model other than the first dynamic model, and an m-th gait parameter that satisfies the boundary 10 condition on the m-th dynamic model is determined. The m-th gait parameter is determined by correcting an object of an $(m-1)$ th gait parameter to be corrected on the basis of the degree of deviation of the gait generated on the m-th dynamic model by using the $(m-1)$ th gait parameter from the 15 boundary condition. A final determined n-th gait parameter and an n-th dynamic model are used to generate a desired gait.